

Notice of Allowability

Application No.

10/632,400

Examiner

Kiet Doan

Applicant(s)

JHA, ANJALI

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 02/08/07.
2. ☒ The allowed claim(s) is/are 1-4,8,9,12,14,16,18-21,24,26,27,29 and 30.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

DETAILED ACTION

1. This office action is response to Remarks file on 02/08/2007.
2. Claims 1, 18-20 are amended.
3. Claims 5-7, 10-11, 13, 15, 17, 22-23, 25, 28, 31 are cancelled.

Allowable Subject Matter

4. Claims 1-3, 4, 8-9, 12, 14, 16, 18-21, 24, 26-27, 29-30 are allowed.
5. The following is an examiner's statement of reasons for allowance:

The prior art record, Kuwahara (US 7,013,11) teaches a method of supporting a handover decision in a wireless communication system comprising:

obtaining at least four time of arrival measurements for a subscriber station from at least four transmitting sources, wherein the at least four transmitting sources comprise known locations (Abstract, C11, L1-10, teach using four base station to measure location of terminal).

Zibell (US 6,061,021) teaches calculating initial x_1 , y_1 and z_1 coordinates and network time t_1 for the subscriber station (C3, L1-20 teach calculated velocity of terminal);

However, consider individual or in combination of Kuwahara and Zibell **are fails to suggest or fairly teach** calculating a next x_2 , y_2 and z_2 coordinates and network time t_2 for the subscriber station;

obtaining a velocity vector for an x component by $(x_2 - x_1)/(t_2 - t_1)$, a y component by $(y_2 - y_1)/(t_2 - t_1)$ and a z component by $(z_2 - z_1)/(t_2 - t_1)$;

obtaining a magnitude of the vector by $\sqrt{x^2 + y^2 + z^2}$:

obtaining an estimate of position of the subscriber stations from the next x^2 , y^2 and z^2 coordinates, velocity of the subscriber station from the obtained magnitude of the vector and direction of motion of the subscriber station from a direction of the vector from the time of arrival measurements; and using the estimate, or information derived there-from, to support the handover decision as in specific detail and including all limitations particularly recited in claim 18.

Claims 2-4, 8-9, 12, 14, 16, 19-21, 24, 26-27, 29-30 are allow as being depedent on the independent claims 1 and 18.

Conclusion

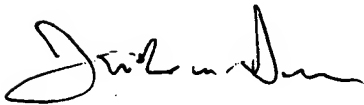
6. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kiet Doan whose telephone number is 571-272-7863. The examiner can normally be reached on 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph H. Feild can be reached on 571-272-4090. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Kiet Doan
Patent Examiner



JOSEPH FEILD
SUPERVISORY PATENT EXAMINER